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## ABSTRACT

This study looks beyond the individuals who drop out to determine the role of schools in the dropout process. It presents a profile of dropouts including the following characteristics: (1) low socioeconomic status, (2) poor school performances, and (3) in-school delinquency. It also addresses the reasons students give for dropping out. The data provide a picture of dropouts very close to that of non-college-bound adolescents who complete high school. Institutional characteristics seem to account for the separation between stay-ins and dropouts. In the typical high school where many drop out, teachers are not particularly interested in students and the discipline system is perceived as neither effective nor fair. The effects of dropping out on self-esteem and locus of control are seen as outcomes of formal schooling, dependent rather than independent variables. This report sees student and school interacting to produce dropouts, with schools having a responsibility to respond to students who are at risk. Three general policy reforms are recommended: (1) an enhanced sense of professional accountability among educators toward all students, (2) a renewed effort to establish legitimate authority within the institution, and (3) redefining school work to allow more students to achieve success and satisfaction. (LHW)

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DROPPING OUT: HOW MUCH DO SCHOOLS CONTRIBUTE TO THE PROBLEM?

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## I. INTRODUCTION

Dropout rates of 40 and 50 percent from the nation's central city high schools are now being reported. (Ford Foundation Letter, 1984). While most public schools have a much lower drop out rate, the national magnitude of the problem has caused concern among educators and policy makers. In general this concern is based on the prediction that serious economic and social consequences will result for those who fail to obtain a high school diploma. Moreover, it is argued that the civic and economic welfare of the nation is dependent upon a universally high level of educational attainment. Thus for the benefit of both individuals and society, it is assumed that youth should remain in school until high school graduation.

Although the school dropout rate has been on the rise in recent years, viewed historically it is relatively low even today. In 1900, for example, about 90 percent of the male youth in this country did not receive a high school diploma. By 1920 the non-completion rate for males was down to 80 percent. It was not until the 1950's that the dropout rate fell below 50 percent. By the mid to late 1960's the dropout rate reached its low point, and since then the rate for early school leaving has risen.

California illustrates the recent trend in school dropout. In 1967, only 12 percent of the adolescents left school before graduation. By 1970, the rate had risen to 17 percent; by 1972 it had climbed

to 20 percent; in 1976 the rate was 22 percent (Camp, 1980). California seems typical, but a precise figure for the current national dropout rate is difficult to obtain because reporting procedures differ across the country. However, it is reasonable to assume that at least 25 percent of our nation's adolescents fail to graduate from high school.\*

Much of the research on high school dropouts has been based on the desire to find the causes, correlates or motives underlying the actions of the dropouts. Typically, the research begins by looking at the characteristics of those who drop out. The questions guiding the research (as well as the thinking of most educators) are directed at finding those characteristics or qualities of dropouts that make them different from those who complete high school. In conducting the research, a host of social and personal categories are scanned to find those that separate the dropout and the stay-in. In other words, dropping out is construed as a form of social deviance, and an explanation of this deviant action is sought in the characteristics of the group.

Implicit in much research on school dropouts is the assumption that a better understanding of the characteristics of dropouts will

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\*The most recent data on dropout can be found in the High School and Beyond study which shows a 14 percent rate (Peng, 1984). However, this clearly underestimates the number of dropouts since the initial data gathering was begun with sophomores in the spring of 1980 and the follow-up with seniors in the spring of 1982. This means that some members of the class of 1982 had dropped out prior to the first survey and some failed to complete their senior year.

permit educators to develop policies and provide practices that will reduce the number of adolescents who fail to graduate. Clearly, it is important for educators to know that students at risk have certain social, family and personal characteristics. In principle, such information could be used constructively by those in a position to shape policy and practice. However, the fact is that such characteristics can not be easily changed and this means that schools must accept their clients' backgrounds and abilities as given. Therefore, if the research on dropouts continues to focus on the relatively fixed attributes of students, the effect of such research may well be to give schools an excuse for their lack of success with the dropout. Institutional thinking may go something like this: After all, it is not the school's fault that some of its students are from poor homes and not very talented academically, and since we can not do anything about these things that interfere with school success, the school is absolved of any responsibility for the fact that a sizeable portion of its clients find good reasons to leave before graduation.

Since traditional research has tended to identify characteristics least amenable to change, the focus of new research might better be directed toward understanding the institutional character of schools and how this character affects the potential dropout. While institutional character has broad meaning, the focus can be narrowed to those policies and practices that have impact on the

institution's holding power. This holding power ought to be part of our definition of school excellence in a democratic society where schools are to serve all of its citizens, not just the academically agile.

A new focus for research can go beyond those findings that now are confirmed by a broad base of research; i.e., that those youth most likely to dropout come disproportionately from backgrounds of low SES. Researchers need now to ask why these youth are most at risk, and, further, what policies and practices typical of public schools tend to increase the chances of these students dropping out. It is important to conceive this new research in a way that looks for the cause of dropping out not only in the characteristics of the dropout, but also in relation to those institutional characteristics that affect the marginal student in a negative manner. Presumably the school is obligated to create an environment in which these youth can experience some kind of success, find institutional participation rewarding, and develop aspirations for additional schooling that can lead to satisfying employment. We will develop these ideas and sketch this new focus for research in this paper.

## II. WHAT DO WE KNOW ABOUT DROPOUTS?

There are several generalizations that describe school dropouts based on recent research literature. Four national studies utilizing

longitudinal data will be reviewed in this section to present these findings. In addition, a major criticism of this research is offered.

The four longitudinal studies involving dropouts are Project TALENT, Youth in Transition, National Longitudinal Survey of Youth Labor Market Experience, and High School and Beyond. The first study, Project TALENT, began in 1960 when about 440,000 ninth graders from public and private schools across the country were tested. In 1964, follow-up data were collected and those students who had subsequently dropped out were identified. Combs and Cooley (1968) reported sophomore year data for a sample of dropouts consisting of an equal number of males and females and compared them with a control group of an equal number of male and female graduates who did not enter a two or four year college.

Based on a nine item index of socioeconomic level of family environment, Combs and Cooley found 51 percent of the male dropouts came from the lowest quartile of SES background, and 61 percent of females came from the lowest quartile. Only 22 percent of the males and 17 percent of the female dropouts came from the upper half of the SES scale.

A second major finding of this research addresses academic ability and/or performance in course work. A composite academic ability score was created based on a battery of tests from Project TALENT; 55 percent of the males and 40 percent of the female dropouts were in the bottom quartile of ability as defined by TALENT. This compares with the controls where 28 percent of the males and 17 percent of the

females were in the bottom quartile. Reading and mathematical performance for the dropouts were consistently below those of the control group.

Self-perception of personal and social characteristics is a third focus of this research. In Project TALENT students were given 150 statements potentially descriptive of themselves. Ten different scales were derived from these statements. For both male and female dropouts the pattern was the same; they scored significantly lower than controls on most of the scales including tidiness, calmness, vigor, self-confidence, culture, mature personality, and sociability. Male dropouts scored higher than controls on impulsiveness, but this is considered a negative characteristic.

It is not surprising that an analysis of data on dropouts finds them less conforming to institutional norms for what is a "good student." The conception of the variables in this study is likely to contain some middle class biases that result in negatively labeling the dropout. In addition, these same biases may also be reflected in the culture of the school and contribute to an alienation of low SES youth. Not pursued by the study are questions regarding the way in which the school responds to those who bring to school a somewhat different set of cultural characteristics. To fail to question existing school practices vis a vis the marginal student is to sanctify implicitly an ineffective and even discriminatory institution.



A second major longitudinal study involving dropout is reported by Bachman, et al (1971) based on data gathered in the Youth in Transition survey conducted by the Survey Research Center at the University of Michigan. This study is based on a national sample of about 2,000 adolescent boys. The data were first gathered in the fall of 1965 when the boys entered tenth grade with subsequent collections in the spring of 1968, 1969, and the summer of 1970. Reports of the data describe three groups--dropouts, graduates not pursuing additional schooling, and those graduates who entered post-secondary schooling.

Youth in Transition used six ingredients to arrive at a measure of socioeconomic level (SEL). This scale was subsequently divided into six levels. Bachman states that SEL is "the most fundamentally important of the family background measures examined in the Youth in Transition study" (p. 26). SEL is highly correlated with other home environment measures, intelligence and reading comprehension. In addition, school grades, college plans and occupational aspirations are all positively correlated with SEL. While the implication appears to be that these students are deviant or deficient, this data also can be interpreted to suggest that the institution has created conflict with these youth to the extent they rejected school.

Bachman found that almost 60 percent of the dropouts came from the two lowest of six socioeconomic levels. This is roughly the same

finding that Combs and Cooley report. Bachman adds several other family background factors to SEL in a regression equation designed to identify the dropout. These additional family background factors are family size, parental punitiveness, and broken home. The analysis resulted in a multiple R of .43 and an explained variance of about 19 percent. In other words, SEL plus other family background characteristics leaves unexplained about 80 percent of the total variance.

A second major predictor of dropout in the Bachman study is academic ability/achievement. This finding is based on a battery of vocabulary and reading tests that produce a multiple R of .42 and an explained variance of about 18 percent. It was assumed, of course, that measures of ability/achievement and family background overlap to some extent. The question was pursued as to how much better prediction could be made if family background and ability/achievement were combined. A regression analysis using the four background and two ability/achievement measures resulted in a multiple R of .49 and an explained variance of about 24 percent, or an increase of 5 to 6 percent over each factor alone. Thus ability/achievement factors overlap considerably with family background in view of this gain in explained variance resulting from their combination.

Bachman found five additional factors that have some strength in predicting dropout. These are grade failure, class grades, negative school attitudes, status of aspired occupation, and

in-school delinquency. With the possible exception of occupational aspirations, these factors all reflect direct experience or relations with the school rather than family background factors. Certainly the most interesting finding of the entire Bachman study is the strength of the "in-school delinquency" factor. "Indeed, delinquent behavior in school during the junior high school years is our most powerful predictor of dropping out" (p. 104). It is, moreover, the only predictor that makes a sharp distinction between dropouts and non-college-bound graduates. All of the other measures show a greater difference between the terminal graduate and the college-bound graduate (see Table 1).

In summary, using fourteen factors that comprise the categories of family background, intellectual abilities and achievement, school experience and attitudes, and personality and behavior, Bachman arrived at an explained variance of about 19 percent when comparing dropouts and non-college-bound stay-ins. The factors used by Bachman are a more powerful predictor of being college-bound than of dropping out, and the problem of distinguishing dropouts from the non-college-bound stay-in is more difficult. While there is something of a continuum from dropout to graduate to college-bound-graduate, dropouts and terminal graduates are less distinguishable than are terminal graduates and their college-bound peers.

In addition to developing predictive analysis of dropouts, the Bachman study also provides longitudinal data on a series of

self-perceived categories involving self-esteem, aspirations, locus of control, trust, aggression and delinquency. Changes over time in these self reports are used as measures of effects of dropping out or staying in school. The dominant pattern for these various measures is one of stability rather than change. In other words, differences that distinguish dropouts from stay-ins at the beginning of the study (tenth grade) persist over three years of the study. In some cases where change occurs, it is in the direction that reduces slightly the differences between dropouts and graduates. This suggests that whatever factors are responsible for dropping out, they exist prior to the tenth grade, and the subsequent act of dropping out does not exacerbate any of the measured self-perceptions of these adolescent males. There is no evidence that dropping out is perceived as a negative action by the dropouts during the first three years.

The use of the Rotter scale to measure "internal and external control" reveals a small distinction among the three groups. While the dropouts are consistently lowest in internal control (considered a negative result) and the college-bound the highest, the gap between the dropouts and the other two groups actually narrows slightly during the three years. Again, this occurs despite the fact the dropouts are taking the step of leaving school.

The findings on self-esteem and locus of control argue that the act of dropping out does not produce a state of depression or sense of power-

lessness. Instead, it suggests that the self-perceptions of the dropout have developed prior to their action. The fact that the slight upward trend in self-esteem for example, continues after dropping out provides some evidence that this action may be a positive step in the eyes of these adolescent males.

A third study utilizing longitudinal data about dropouts is offered by Rumberger (1983) based on the National Longitudinal Survey of Youth Labor Market Experience from 1980. It provides data on Hispanics, whites and blacks, both male and female. Reasons for dropping out were obtained in the survey and four major categories are presented: school related, economic, personal and other. By far the most often given reason for dropping out is "school related" (44 percent). Within this category several more specific reasons were offered, but 29 percent reported they simply "disliked school." Males, especially white males (36 percent), were black and white, 24 percent gave this reason for leaving school.

much more likely to give this reason than females. For females, Hispanic, The general category of "economic" reasons produced a 20 percent response, with the more specific reason of "desired to work" making up half of the economic reason responses. Here males were two to three times more likely to give this response than females of their corresponding racial/ethnic group. It is not clear, however, the extent to which work is seen as a more positive alternative than school and that this response is simply another way of saying

Table 1

## YOUTH IN TRANSITION STUDY

## PREDICTORS RELATED TO EDUCATIONAL ATTAINMENT

FAMILY BACKGROUND	1/2 SD		Grand Mean	1/2 SD
	1	2		3
Socioeconomic level (low-high)				
Number of siblings (many-few)		1 2		3
Broken home (more-less frequent)		1	2 3	
Parental punitiveness (high-low)		1 2		3
INTELLECTUAL SKILLS				
GATB-J test of voc- abulary (low-high)	1	2		3
Gates reading test (low-high)	1	2		3
SCHOOL EXPERIENCE AND ATTITUDES				
Grade failure (more-less frequent)	1		2	3
Classroom grades (low-high)	1	2		3
Negative school attitudes (more- fewer)	1		2	3
PERSONALITY AND BEHAVIOR				
Self-esteem (low-high)		1 2		3
Somatic symptoms (more-fewer)	1		2 3	
Ambitious job attitudes (low-high)		1 2		3
Status of aspired occupation (low-high)	1	2		3
Delinquent behavior in school (more-less frequent)	1	2		3

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1=Dropouts, 2=Graduates, 3=College-bound.

that school is disliked. This possibility is strengthened in view of the fact that only 4 percent of all dropouts reported "financial difficulties" as a reason for leaving school.

"Personal reasons" is a category comprising two closely related factors--pregnancy and marriage. Here, of course, the responses are skewed heavily for females. These two reasons combined to account for 33 percent of all females who dropped out. About 30 percent of Hispanic and white females gave marriage or pregnancy as their reason and each group was about equally divided between these two reasons. However, 41 percent of the black females reported pregnancy and 4 percent reported marriage as their reason. Only 2 percent of all males reported "marriage" as their reason for leaving school.

Rumberger sees these self-reported reasons as important to our understanding of the dropout phenomenon, but he states "the propensity to drop out is undoubtedly related to a number of underlying factors," and these are assumed to be more powerful causes (p. 201). He cites a number of studies confirming the influence of family background as the factor most strongly related to educational attainment. In this research tradition, he examines the relationship between different race and sex combinations, family background and the dropout rate. To do this Rumberger develops two simulations which utilize the NLS data to predict the probability of dropping out under two sets of family background conditions. The first simulation depicts a person from moderately high socio-economic conditions--a household with two parents, two children, average educational levels for parents and

home reading materials. The second simulation assumes a household with low socio-economic conditions--modest education, no father, four children, little home reading material. In addition, other variables were added in attempting predictions of dropout. These included aspirations, locus of control, and early marriage/pregnancy.

Rumberger found additional support for previous findings that family background is a "powerful predictor of dropout behavior" (p. 205). His simulations show that low socio-economic background has a strong effect in predicting dropout. While dropout rates vary by race, with minorities significantly higher, the simulations reveal that when minorities are assumed to have the same family background as whites, the predicted dropout rate for minorities is about the same or even slightly less than whites. For example, the probability that a black female from a low socio-economic background will drop out increases by 40 percent if she has a child within nine months of leaving school, but there is only a 4 percent increase in probability of dropping out if this black female is from a high socio-economic background.

Several factors were added to family background in attempting to increase the probability of predicting dropout. It was found that lower levels of educational aspirations increase the likelihood of dropping out. Males who aspire to professional or managerial positions later in life have significantly lower dropout probability. Rumberger's methodology, however, did not allow him to determine whether low aspirations are cause or symptom of dropping out.



Consistent with other studies is the finding that higher academic ability/performance levels indicate lower dropout rates. For white males, especially, an external locus of control measure indicted a higher dropout rate. Because the data were gathered after these youth dropped out, this study does not allow one to distinguish between psychological factors that preceded dropout and those that result from this action. Moreover, the study does not furnish any insight into the psychological mechanism whereby the conditions of low socio-economic background are translated by adolescents into a decision that school is not a place for them to stay.

The most recent data on dropouts come from the High School and Beyond (HS&B) data set made available from the National Center for Education Statistics. As noted earlier, HS&B data underestimate the true dropout rate nationally because of the timing of the data gathering during the sophomore and senior years, and any percentage rates would be viewed in this light. One of the strengths of HS&B is the follow-up of dropouts. Of those who dropped out during the study about 50 percent were located and given a survey to fill out. 88 percent of those contacted completed the questionnaire.

Preliminary analysis of the data indicates further confirmation of several previous findings (Peng, 1983). Low socioeconomic background and poor academic performance are associated with higher dropout rates. The dropout rates of low, middle and high SES students were 17 percent, 9 percent and 5 percent respectively. Unfortunately, almost 32 percent of all dropouts failed to report information on their

socioeconomic situation and therefore are classified as "unknown." It is entirely possible that a disproportionate number of this "unknown" group would fall into the low SES category and thereby magnify the differential dropout rate between SES categories. About 43 percent of the dropouts self-report they received "mostly D's" in course grades. Thus, low SES and low grades continue the pattern established in the previous studies of dropouts.

HS&B pursued the question of what reasons youth give for why they drop out of school. Almost 2300 dropouts responded by checking as many reasons as they thought applied to their decision. Several major categories of response emerge from this data. The main categories are related to school, family and employment. By far the most frequently cited reasons dealt with school problems; for example, "school was not for me", "had poor grades," "couldn't get along with teachers," "expelled or suspended." The most frequent response cited school related reasons for leaving; "school was not for me" was checked by 66 percent of all respondents.

The family-related reasons dealt primarily with marriage and pregnancy. Fifty-four percent of the females indicated they dropped out due to marriage or pregnancy. Employment was cited by 27 percent of the males and 11 percent of the females as a reason. Here respondents were checking the statement "offered a job and chose to work." Again, as the other research there is no distinction between respondents perception that they needed to work as opposed to simply seeing work as a more interesting and rewarding pursuit than school.

## SUMMARY

Based on the four different data sets reviewed up to this point, what has been learned about the dropout phenomenon? The major trends are persistent. First, a family background characterized by low socioeconomic status is strongly associated with dropping out. All four studies confirm this. Precisely what it is about this kind of family background that produces youth who are poor risks to finish school is not clear. In addition, poor school performance leading to low grades and course failure are associated with dropping out in all of the studies. There is some evidence that dropouts exhibit several social-psychological characteristics that distinguish them from stay-ins. However there are no consistent categories or measures across these studies to sustain any findings of causality. In general, it is not clear if measured characteristics such as low educational/occupational aspirations, weak sociability, negative school attitudes, low self-esteem, and external sense of locus of control are brought to the school or produced by school experiences. The strong association between in-school delinquency and dropping out found by Bachman suggests that the school itself may contribute to negative school experiences that lead to dropout. It would seem worthwhile to begin sorting out this cause-effect confusion.

An important source of information about dropouts is the set of reasons they give for leaving school. Although there is a tendency by researchers to see such information as less important, or at least to treat it as "surface" data as opposed to "underlying" data which are

assumed to be more powerful, there is a clear trend in what students say. They leave because they do not have much success in school and they do not like it. Many of them choose to accept entry-level work or to care for their children, choices which apparently are seen as more attractive than staying in school.

The problem of females leaving school because of marriage and/or pregnancy is a major factor in the dropout rate. The HS&B data indicate that about half of all female dropouts leave for this combined reason. It is an important social phenomenon when children are having children, but it is also a reflection on the holding power of the school for low SES females. How is it that child care is more attractive than schooling? While there may be implications for sex education in the female dropout statistics, it is probably more pragmatic to look at ways to attract these young mothers back into the educational stream.

One of the assumptions in all of these studies is that dropping out is bad, and that one of the purposes of research is to understand the dropout problem better and subsequently help lower the number of youths who leave school early. The intent is noble, but it does not appear that the research is likely to have any significant impact on school policy and practice. One reason for this is the bias inherent in focusing exclusively on the socioeconomic and personal characteristics of dropouts; i.e., the family background, academic ability and performance, and personality characteristics that distinguish dropouts from successful students. As social deviants, attention is drawn to the inherent attributes of this group. This is compared explicitly with attributes

of those who stay in school, and there is a taken-for-granted juxtaposition of dropouts with those students who are successful vis a vis the dominant practices, expectations and norms of contemporary public schools. The characteristics displayed by dropouts necessarily result in an individuous comparison with non-dropouts. More significant, however, this research focus brings with it no suggestion that policies and practices of the institution itself should be seen as problematic in relation to those students who become marginal.

### III. DROPPING OUT AS A PROBLEM OF SCHOOL POLICY AND PRACTICE

While the major longitudinal studies of dropouts have paid little attention to the role played by school factors, there is empirical evidence as well as theoretical support for redefining the problem to take such factors into account. Directing attention to school policy and practice may provide an increased understanding of the causes of dropout. By searching for school factors that contribute to marginal students' decision to drop out, such research can provide grounds for school-based reform. Although schools can do nothing about students' SES or innate ability, important contributing factors to dropout that are under the control of the school may be modified to change the school conditions of marginal students.

The High School and Beyond study for the sophomore 1980 cohort provides the most recent longitudinal data in which dropouts are systematically sampled before and after their decision to leave school. Although the HS&B data set is rich, analysis is necessarily constrained by the

design of the original study. Where we might have asked a question differently or sought additional validation or solicited information about other school-related variables, we obviously could not. Our analysis therefore uses the information made available to us by HS&B and should be viewed as exploratory and tentative. Should these data indicate the importance of specific school conditions in predicting dropout, more specific studies will need to be conducted to determine the extent to which schools can be said to contribute to the dropout problem.

HS&B data were first gathered in 1980 when the subjects were sophomores. In 1982, a follow-up questionnaire was given to the same students. Those who dropped out were located and asked to fill out a slightly different questionnaire. To determine the extent to which certain variables available from HS&B among three groups, a multivariate discriminant analysis was run. This procedure analyzes a set of independent variables to determine if differences in student responses provide a basis for discriminating among two or more groups. In this case the discriminant analysis was intended to identify dropouts, stay-ins and college-bound. Each independent variable is tested to determine whether it makes a statistically significant contribution to identifying group membership. When comparing three groups the test produces two discriminant functions that have separate weights (coefficients) for each independent variable. The first function accounts for the most explained variance, and the second accounts for the remaining explained variance.

The independent variables used in the discriminant analysis were carefully selected from the HS&B data set to represent a range of factors likely to influence the decision to drop out. Items identified as important in prior research were included such as SES, race, academic ability/ performance, self-esteem and locus of control. A second set of variables were chosen because they reflect a range of school conditions experienced by students that might influence them to drop out. These include peer relationships, sociability, disciplinary problems, and the amount of formal schooling they expect to attain. The selection of these two sets of variables provides a basis for determining the importance of relatively fixed characteristics brought to the school as compared to social conditions encountered by students while in school.

The analysis was carried out on a 40% random, weighted sample of HS&B public school students. The two functions are found in Table 2 listing the variables and their coefficients. Some conceptual clarifications are in order for several of the variables. SES is divided into quartiles based on student reports of five family characteristics including father's occupation, father's and mother's education, family income and the presence of certain household items. Test refers to quartile placement based on a battery of HS&B tests at 10th grade that include mathematics, vocabulary, language and grammar usage, knowledge of science and civics. The type of information gained from these tests is a measure both of ability and achievement that accrues from taking standard school subjects. Grades refers to the self-reported

letter grades students have achieved in high school. Self-esteem is a four item composite scale based on responses to questions such as, "I am able to do things as well as most other people." The Locus of Control scale is also a four item scale using questions such as, "Good luck is more important than hard work for success." Hours worked is the self-reported number of hours a week the students works at a job. Truancy refers to the self-reported number of school days missed when not sick. Late is a measure of the number of days a student was late to school. Discipline is a three item scale asking the student about discipline problems in the past year, about being suspended or placed on probation, and about cutting classes every once in a while. Finally, Expected School Attainment is a single item reflecting students' responses to a question asking how much formal schooling they expect to get. This item provides for nine levels of possible responses--from "less than high school graduation" to "Ph.D. or M.D."

Findings for the discriminant analysis on the total sample will be presented first (see Table 2). Later findings from separate discriminant analyses for each of three races (Hispanic, Black, White) will be presented (see Table 3) and compared to findings for the analysis as a whole.

For the full sample, Function 1 accounts for 89% of the variance between groups. Expected School Attainment is by far the most powerful variable (.61) in discriminating among the three groups. Test (.29), SES (.25) and Grades (.22) are also powerful predictors and are positively



Table 2

## HS&amp;B DATA

## DISCRIMINANT ANALYSIS COEFFICIENTS (FULL SAMPLE)

	<u>Academic Function 1</u>	<u>Social Context of School, Function 2</u>		
SEX	.09	-.07		
HISPANIC	-.08	.03		
BLACK	.02	-.03		
WHITE	-.15	.13		
SES/Q	.25	-.07		
TEST/Q	.29	.05		
GRADES	.22	-.20		
S/ESTEEM	.04	-.20		
LOC/CONTROL	-.00	-.00		
HOURS/WRKD	-.11	.22		
TRUANCY	-.12	.47		
LATE	.07	.25		
SUB/FEELS	.05	.13		
OTHERS/C/ME	-.01	.08		
ACDM/INSTR	.03	-.04		
REPUT/COM	-.03	.	1	6
SCH/CLIM	.01	.07		
SCHL/PROBS	.01	.00		
INTR/SCHL	.01	-.09		
DISCIPLINE	-.10	.41		
LAW/PROBS	-.07	.51		
EXP/SCHL/ATN	.61	.45		
GROUP CENTROIDS				
Group 1 (Dropouts)	-1.20	.69		
Group 2 (Stay-ins)	-.56	-.26		
Group 3 (College-bound)	1.08	.09		

## CLASSIFICATION RESULTS

Actual Group	Predicted 1	Group 2	Membership 3
1 (Dropouts)	63%*	24%	13%
2 (Stay-ins)	22%	54%*	24%
3 (College-bound)	5%	11%	84%*

OVERALL: 67% CORRECT

\*percent of accurate predictions for each group

Table 3

## DISCRIMINANT ANALYSIS COEFFICIENTS BY RACE/ETHNICITY

	<u>White</u>			<u>Black</u>			<u>Hispanic</u>	
	F1	F2	F1	F2	F1	F1	F2	
SEX	.12	-.13		-.12	.05		-.01	-.03
SEX/Q	.23	-.05		.23	.06		.36	.01
TEST/Q	.26	.01		.35	.08		.19	-.13
GRADES	.20	-.21		.22	-.12		.39	-.05
S/ESTEEM	.04	.05		.01	-.00		.01	.11
LOC/CONTROL	-.01	-.05		.05	.04		-.17	-.01
HOURS/WRKD	-.11	.23		-.13	.33		-.10	-.15
TRUANCY	-.09	.38		-.17	.37		-.55	-.48
LATE	.05	.24		.22	.41		.05	-.14
SUB/FEELS	.05	.13		-.03	-.16		-.06	-.22
OTHERS/C/ME	.03	-.02		.14	.14		.27	.19
ACIM/INSTR	.02	.12		.06	.26		.05	-.04
REPUT/COM	.03	.13		.04	-.13		-.24	-.10
SCHL/CLIM	.01	-.14		.06	-.26		.01	.02
SCHL/PROBS	.01	-.04		.02	-.09		.04	.00
INTR/SCHL	.01	-.05		.02	-.16		.05	.08
DISCIPLINE	-.10	.48		-.14	.34		-.19	-.13
LAW/PROBS	-.05	.13		-.05	-.08		-.18	-.11
EXP/SCHL/ATN	.64	.45		.59	.33		.28	-.70

## GROUP CENTROIDS

1 (Dropouts)	-1.47	-.58		-1.28	.83		-1.21	.66
2 (Stay-ins)	.01	.43		-.39	-.35		-.62	-.24
3 (College-bound)	1.29	-.61		.82	.18		1.08	.07

## CLASSIFIED RESULTS

	Predicted Group			Predicted Group			Predicted Group		
	1	2	3	1	2	3	1	2	3
Actual Groups									
1 (Dropouts)	83%*	14%	3%	75%*	14%	11%	62%*	24%	15%
2 (Stay-ins)	18%	61%*	21%	17%	59%*	24%	24%	52%*	24%
3 (College-bound)	7%	13%	81%*	9%	15%	76%*	4%	11%	85%*
OVERALL CORRECT:	70%			68%			67%		

\*percent of accurate predictions for each group.

correlated with Expected School Attainment. The fact that Expected School Attainment, Tests, SES, and Grades emerge as powerful predictors in Function 1 suggest that it can be interpreted as an academic function.

Group centroids show that Function 1 spreads the three groups along the horizontal axis with the greatest difference between dropouts (group 1) and college-bound (group 3). This finding is consistent with previous literature and offers the following picture of the college-bound student: high expectations, high achievement/ability, high SES, and high grades. Conversely, the dropout is characterized as one who has low expectations, low achievement/ability, low SES and low grades.

Once the academic function is partialled out, a new set of variables emerge as important predictors: Truancy (.47), Expectations (.45), Discipline Problems (.41), Lateness (.25) and Hours Worked (.22). Function 2 accounts for 11% of the pooled variance and seems to discriminate best between dropouts (group 1), and stay-ins (group 2). This function may be regarded as a social context of schooling function. The picture which emerges in Function 2 is of dropouts who differ from their academically similar peers in terms of their high truancy, discipline problems, lateness, and hours worked. Interestingly, students exhibiting these unconventional behaviors have expectations about future schooling which are fairly high.

The two function model described above successfully predicted 63% of the dropouts, 54% of the stay-ins, and 84% of the college-bound for the combined sample. We would expect stay-ins to be the most difficult group to predict in that this group includes students with widely varied backgrounds, abilities, and behaviors. We can imagine students at the

tails of this group choosing to drop out or go to college for reasons not explained by the model.

Because of the relatively large number of whites in the sample, it was decided that a second analysis was needed using racial/ethnic categories. Thus, the discriminant analysis was re-run for three groups (Hispanics, blacks, whites). The analysis for white students (see Table 3) does not differ substantially from the combined analysis. However, two variations are worthy of note. Expected School Attainment is slightly more powerful in Function 1. Discipline Problems is more powerful, while Truancy declines somewhat in importance in Function 2. The ability to correctly predict groups is roughly the same for whites as for the races combined.

Analysis of the black sample does not differ significantly from the whites or the overall sample. Function 1 can still be regarded as an academic function with Expected School Attainment (.59), Test (.35), SES (.23), and Grades (.22) as powerful. Interestingly, Lateness (.22) also emerges as a powerful predictor in Function 1. This suggests that even academically successful blacks self-report significant tardiness.

Function 2, which for blacks explains 22% of the pool variance can be again interpreted as a social context of schooling function. Tardiness (.41), Truancy (.37), Discipline Problems (.34), Hours Worked (.33), Expected School Attainment (.33), are the most powerful predictors for Function 2. These variables are all positively correlated with one another. Thus, a similar picture of the black dropout emerges to that described for the overall sample. Of interest, however, are four additional

variables: students' judgment of Instructional Quality (.26), School Climate (-.26), how the Subject Feels About Others (.16), and how subjects think Others See Me (-.14). Others See Me and School Climate are negatively correlated with the discriminating variables above, while Subject Feels About Others and Instructional Quality are positively correlated with the most powerful predictors in Function 2. This suggests that while blacks accept the dominant norms of schooling and see themselves as accepting of others, their day-to-day experiences in school are somewhat negative. This model accurately predicts 75% of black dropouts, 59% of black stay-ins, and 76% of black college-bound youth.

A somewhat different picture emerges for Hispanics. As before, SES (.36), Test (.19), Grades (.39), and Expected School Attainment (.28), contribute greatly to the ability of Function 1 to discriminate among groups. Expected School Attainment is significantly less powerful than for blacks and whites, while several other variables gain importance; Truancy (-.55), Others See Me (-.27), School Reputation in Community (-.24), Discipline Problems (-.19), and Problems with the Law (-.17). Because all of the latter variables are negatively correlated with SES, Test, Grades and Expected School Attainment, we can think of Function 1 as differentiating the three groups along a continuum where the college-bound student has high grades, high SES, high achievement/ability,

low truancy, and few discipline problems in school or problems with the law. Conversely, the dropout can be characterized as having low grades, SES, achievement/ ability, and a high incidence of truancy, in-school discipline problems and problems with the law. Although the academic dimension is still prominent in Function 1, a wider array of variables contribute to the ability in Function 1 to discriminate among groups. This suggests that for Hispanics the academic and social context functions are undifferentiated.

Once Function 1 is partialled out, Expected School Attainment (-.70) and Truancy (-.48) again appear to be the most powerful variables in discriminating between dropouts (group 1) and stay-ins (group 2). Both coefficients are negative indicating that stay-ins as a group are characterized by low expectations and low truancy. Despite the tentativeness of the analysis, this model successfully predicts 83% of the Hispanic dropouts, 61% of the stay-ins, and 81% of the college-bound. Function 1 explains 76% of the variance and Function 2 the remainder.

Since Hispanics appear to view school differently than whites or blacks, and because interpretation of this view is difficult, given the data from the HS&B study, we are hesitant to specify relationships more precisely.

If, in fact, Hispanics as an ethnic group bring with them differing views of school, or possibly have differing school experiences, this provides an opportunity for important research. From the standpoint of school policy and practice, it is essential for educators to become knowledgeable about the way school can be perceived differently and can

affect different groups of adolescents in different ways. The exploration of cultural, ethnic and social class differences regarding school can provide a basis for understanding and acting upon the problem of differential achievement by these groups in school.

From an institutional perspective, the data from Functions 1 and 2 suggest that there is a serious problem with the holding power of school for some youth. Dropouts do not expect to get as much schooling as their peers and this is quite understandable. They do not perform as well as their peers on school-type tests, their grades are lower than their peers, they are more often truant both in and out of school, and generally they get into more disciplinary trouble than other students. Given this rather negative set of experiences, it should not be surprising that these students leave the school for a different environment. For most the intent is to enter the world of work which must look more rewarding than the environment they have endured for many previous years.

While the discriminant analysis using the variables available through HS&B data base does have a margin of error, it is more powerful than variables such as SES and academic ability in identifying dropouts in relation to non-college-bound graduates. In addition the variables used provide a somewhat different picture of the problem. It suggests that in addition to the characteristics brought to school by the student, there are several institutional characteristics that are problematic if one wishes to affect the number of students leaving school early (see Table 4).

Table 4

## HS&amp;B DATA

## SUMMARY OF PREDICTOR VARIABLES FOR EACH STUDENT GROUP

	<u>-1 SD</u>	<u>-1/2 SD</u>	<u>Mean</u>	<u>+1/2 SD</u>	<u>+1 SD</u>
SES/Q		1 2			3
TEST/Q		1 2			3
GRADES	1	2		3	
S/ESTEEM		12	3		
LOC/CON		1 2		3	
HRS/WRKD		1	2 3		
TRUANCY	1		2 3		
LATE		1	32		
SUB/FEELS		12	3		
OTHERS/C/ME		12	3		
ACDM/INSTR			13 2		
REPUT/COM			21 3		
SCHL/CLIM			1 2 3		
SCHL/PROBS			1 2 3		
INTR/SCHL		1	2 3		
DISCIPLINE	1		2 3		
LAW/PROBS		1	2 3		
EXP/SCHL/ATN	1			2 3	

---

1=Dropouts

2=Non-college bound graduates

3=College-bound graduates



It can be argued, of course, that discipline problems are associated with low SES and other background factors. Even if this is the case, it is crucial to view the dropout problem as growing out of conflict with estrangement from institutional norms and rules that are represented in the variations of discipline problems. If the intent of social policy is to reduce the number of dropouts, then policies and practices of schools will need to respond to this conflict with and estrangement from the institution arising out of the social and family background of students. Certainly public schooling in a democratic society is obligated to respond constructively to children from all backgrounds and social conditions. It may be that some kinds of children are more difficult to teach than others, but the school has no less of a mandate to do its best to provide all the schooling such children can profitably use. This is precisely the mandate that has been accepted by schools for handicapped children.

Based on HS&B data many tenth graders indicate intentions of not only graduation but also pursuing post-secondary schooling. However, their high school experiences during the next years do not lead to a fulfillment of these expectations. This is unfortunate for both individuals and society since the diversity of post-secondary education available in this country can provide worthwhile alternatives for most youth. It appears that rather than broadly promoting the realization of youthful expectations schools now work to undermine them, except for those students who are most obviously facile with a restricted conception of learning. Again, we argue it is a responsibility of

school to enhance and reinforce the expectations of all youth regarding their attainment of schooling.

#### IV. IDENTIFYING DROPOUTS THROUGH AN ANALYSIS OF SELECTED SCHOOL VARIABLES

The most difficult task in selecting dropouts from a group of students is distinguishing between the dropout and the terminal graduate. A clearer picture of who drops out can be obtained by inspecting the pattern of responses to specific items for both dropouts and stay-ins. The question being asked is the extent to which dropouts and stay-ins are similar or different, particularly in terms of their experiences and views regarding school.

Two variables can be seen as measures of student alienation and rejection of school--Teacher Interest in Students and Effectiveness and Fairness of Discipline (see Table 5). These items reveal a general student discontent over the relations students have with the institution and its adults. When those who eventually became dropouts were asked to rate teacher interest in students on a four point scale, marks of fair to poor were given by 56% of the Hispanics, 50% of the blacks and 59% of the whites. Non-college-bound students are not much more positive about teacher interest in students in view of the fair to poor ratings given by each racial group (Hispanics 49%, blacks 47%, and whites 49%).

In terms of effectiveness of discipline, schools receive rather negative ratings also. Using a four point scale, about half of both the

Table 5

## HS&amp;B DATA

## School Factors: Percentage Responses for Each Item

Item	Response	Hispanics		Blacks		Whites	
		N	CB DO	N	CB DO	N	CB DO
Rate teacher interest in students	-poor	10	17	14	20	12	20
	-fair	39	39	33	30	37	39
	-good	36	31	38	24	40	30
	-excellent	11	7	8	11	7	7
	-don't know	4	6	7	15	4	4
Rate effectiveness of school discipline	-poor	13	21	12	16	11	12
	-fair	42	28	40	47	41	38
	-good	33	34	24	16	35	33
	-excellent	6	14	12	6	8	11
	-don't know	8	6	11	15	5	6
Rate fairness of school discipline	-poor	19	22	22	28	21	26
	-fair	37	27	39	31	38	38
	-good	29	22	25	19	33	25
	-excellent	6	10	6	5	5	5
	-don't know	9	8	7	17	4	6

stay-ins and dropouts among Hispanics gave poor or fair ratings to their schools. Among blacks, 52% of the stay-ins and 63% of the dropouts rated discipline effectiveness as poor or fair. Among whites, the rating of poor or fair was given by 52% of the stay-ins and 50% of the dropouts. These data show consistency across all combinations of groups regarding the relative ineffectiveness of school discipline, and there is no indication of any important differences between stay-ins and dropouts concerning discipline effectiveness.

On the question of fairness of discipline the schools rated even more negative responses from students across the board, regardless of race or status as a student. Hispanics and blacks gave nearly identical responses. The ratings as poor or fair ranged from 56% to 61% for both the stay-ins and the dropouts in both groups. Whites were even more critical; 59% of the non-college-bound and 64% of the dropouts rated the fairness of their school's discipline as poor or fair.

Taken as a whole the response of a broad range of students on the issues of effectiveness and fairness indicate a consistently negative view. While both minority groups are critical of the discipline in their schools, it is the whites who are most unhappy. Further inspection of the data revealed that 48% of the white college-bound students gave poor or fair ratings to their schools on discipline fairness. This suggests that schools have a serious problem with how students perceive the discipline system.

Up to this point most of the categories of student responses have not revealed substantial differences in responses when comparing the non-college-bound stay-in and the dropout. However, when the statement, "I am satisfied with the way my education is going," is presented, clearer separation for these two groups appears. Among Hispanic dropouts 58% answered false, while 38% of the stay-ins said false. Among whites the response was 52% and 33% respectively. These data indicate an unhappiness over the schooling the soon-to-be dropout has experienced.

Another category that reveals marked differences between dropouts and stay-ins is whether they have ever been suspended or on probation. For Hispanics, 31% of the dropouts and 17% of the stay-ins report such disciplinary actions. Black dropouts gave 44% affirmative response while their non-college-bound peers gave a 19% response. For whites the differential between dropouts and stay-ins is 26 percent and 11% respectively. This self-report data indicates that dropouts do have greater disciplinary problems than other students with blacks having the greatest likelihood of a serious discipline problem with the school. In view of the generally negative responses by all students regarding the effectiveness and fairness of the discipline system, it is not unreasonable to assume that marginal students doing poorly in academics who also experience disciplinary trouble will acquire a set of negative school attitudes.

One variable that clearly separates stay-ins from dropouts across all three racial groups, and is related to disciplinary problems,

concerns the cutting of classes. Almost two-thirds of the Hispanics and more than half of the black and white dropouts admitted to cutting classes now and then, while their stay-in counterparts were substantially lower at 32%, 29%, and 27% respectively. This difference concerning in-school truancy suggests one way in which the dropout becomes embroiled in both academic and disciplinary problems that can lead to discouragement over the probability of graduation.

In the area of expected school attainment, students were asked "how far in school do you expect to get?" They were given nine levels ranging from less than high school graduation to Ph.D. or M.D. It should be pointed out that among those who actually dropped out very few anticipated this action. Among eventual dropouts only 8% of the Hispanics, 10% of the blacks and 9% of the whites projected that they were destined to attain less than high school graduation.

Among those who eventually left before graduation, 49% of the Hispanics, 31% of the blacks and 45% of the whites saw high school graduation as the end of their schooling. It should be noted that these figures are very similar to the responses of those who became graduates. It also means that among dropouts about 44% of the Hispanics, 60% of the blacks and 45% of the whites projected formal education beyond high school.

One interpretation of these data is that the norm of pursuing formal education is firmly embedded in our culture. While Hispanics project somewhat less education for themselves and blacks substantially more,

even than whites, both the dropout and the stay-in anticipate graduating from high school at the time of data gathering, i.e, the sophomore year in high school. What happens to this commitment to schooling by all groups, both among those who drop out and those who graduate? Since few see themselves dropping out and most see themselves getting more education beyond high school, something happens to dissuade these adolescents from attaining their expectations. One plausible explanation is those who become dropouts see all schooling in relation to their experiences in high school, and in view of their lack of academic success and disciplinary problems, they opt to terminate this negative situation and thereby foreclose many future opportunities to pursue formal schooling.

In summary, the data provide a picture of dropouts that for the most part looks very much like those non-college-bound adolescents who successfully complete high school. It is when factors reflecting institutional characteristics are examined that the separation between stay-ins and dropouts begins to emerge. [ For most students the picture of high school that emerges is a place where teachers are not particularly interested in students and the discipline system is perceived as neither effective nor fair. Understandably, dropouts are not very satisfied with their schooling. For the dropout, school is a place where one gets into trouble; suspension, probation, and cutting classes are much more frequent for this group. Almost all of the youth who eventually drop out see themselves finishing high school, suggesting that dropping out

is not a conscious decision already made that can be identified in the early years of high school. While dropouts do not see themselves attaining as many years of schooling as their stay-in counterparts, it should be noted, that among black dropouts more than 50% see themselves going beyond high school for additional education.

Taken as a whole these data suggest that school factors related to discipline are significant in the development of the dropout. If one comes from a low SES background which may signify various forms of family stress or instability, and if one is consistently discouraged by the school because of signals about academic inadequacies and failures, and if one perceives little interest or caring on the part of teachers, and if one sees the institution's discipline system as both ineffective and unfair, but one has serious encounters with that discipline system, then it is not unreasonable to expect such individuals to become over the years more alienated and less committed to fulfilling the intentions of almost all citizens--graduation from high school and pursuit of more education that can better one's station in life.

The process of becoming a dropout is complex because the act of rejecting an institution as fundamental to the society as school must also be accompanied by the belief that the institution has rejected the person. The process is probably cumulative for most youth. It begins much before the act with negative messages from the school concerning academic and discipline problems. As these messages accumulate into concrete problems such as failing courses and becoming credit deficient



toward graduation, the choices become those of either continuing an extra year or more in a setting that offers increasingly negative experiences or dropping out. Some do elect to stay to graduation while up to 50% of the youth in some schools elect to escape to the perceived opportunities and positive experiences outside.

For the adolescent who has dropped out of high school, the psychological effect is to drop out of formal schooling for the future also. While there are several routes a dropout can use to reenter the system of formal education, generally these youth believe that school is not for them. This decision, of course, precludes many opportunities for personal and economic advancement in the future.

#### V. THE EFFECTS OF DROPPING OUT ON SELF-ESTEEM AND LOCUS OF CONTROL

In this study the variables of Self-Esteem and Locus of Control are better conceived as outcomes of formal schooling, or as dependent variables rather than independent variables. This is based, in part, on the explicit goal statements of public schools that students should acquire positive self-concepts and learn to take responsibility for their actions. These general school goals are also found in more specific form in the rationales of individual courses. If not always stated explicitly, there is implicit in the purpose of public schooling the goals of self-development, self-management, rational decision-making and control of one's circumstances and opportunities through the acquisition of knowledge and skills. Few educators would deny that they are intending to enhance students'

sense of self-esteem and internal control either directly or indirectly through formal schooling.

To see these two factors as outcomes of school is not to deny that other influences from the home and community may have an important effect on them. Parents, for example, have an opportunity to shape positively or negatively an adolescent's sense of self, but sorting out such influences is extremely difficult. What can be done is to look at students both before and after they have dropped out of school and compare them with their peers who continue to graduation and beyond. This allows us to get some indication of the relative contribution school can make in developing self-esteem and locus of control. The HS&B data allow the comparison of racial groups and student status over time (1980-1982) as sophomores become either seniors or dropouts. This provides information on the effects of staying in school or dropping out as measured by self-esteem and locus of control.

Self-esteem is comprised of four items with which students are to either agree or disagree on a five point range. For example, the following item is part of the Self-Esteem scale: "I am able to do things as well as other people." Locus of Control has four items, and students are also asked to agree or disagree on a five point range to items such as "Good luck is more important than hard work for success."

The data in Table 6 indicate that all three student status groups and all three races increased their sense of self-esteem in a positive direction over the three year period. For all but black dropouts the change is statistically significant, and in this case the change score is similar and parallel to those changes for the other comparison groups. Dropouts begin with slightly higher self-esteem than non-college-bound and actually increase the differential by 1982 even though the former have left school. This is true for each racial group. The overall gain in self-esteem by dropouts is exactly the same as for the group with greatest self-esteem, the college-bound. These data make it difficult to argue that dropping out of school has a negative effect on youth. On the contrary, the decision to drop out is good if one is interested in enhancing self-esteem. The largest gain score for any group (.19) is achieved by Hispanic dropouts. For those youth who have been receiving negative signals from the school in the form of poor grades and/or unhappy experiences with the discipline system, dropping out to a different environment is a positive experience. Those youth who are similar to the dropouts in some respects, but who stay to graduation, report less growth in self-esteem than either the dropouts or college-bound.

The question of whether each group's locus of control changes between 1980 and 1982 can be answered from the data in Table 7. Generally there is movement toward a more internal sense of locus

of control. The amount of change varies considerably depending on group. College-bound Hispanics show the largest change toward internal control, and Hispanic dropouts show a similar movement although they remain relatively more externally oriented. Overall changes show an increase of .15 for dropouts, .09 for non-college stay-ins, and .11 for the college-bound group. While dropouts make up some of the difference between themselves and stay-ins, they still project a more external locus of control than their peers. For blacks, the difference between dropouts and stay-ins widens substantially.

The lack of change for dropouts among blacks may reflect their perceived lack of opportunity in the larger society. Those who are out of school, and possibly out of work or underemployed, may very well not see themselves in control of circumstances. Since both minority groups are also characterized by low SES, this combination of factors may explain the original sense of more external control. In other words, low SES can contribute to a more external orientation through a perceived lack of opportunity, greater unemployment, lower income and various forms of discrimination that accompany minority status. Unexplained, of course, is the large change toward internal control among Hispanic dropouts.

Table 6

Sample Means for Self-Esteem Scale By Group and Race  
(lower numerical values indicate more positive self-esteem)

	Dropouts		Non-college bound		College-bound	
	1980	1982	1980	1982	1980	1982
Hispanic	1.84	1.65**	1.91	1.79**	1.84	1.69*
Black	1.76	1.66	1.74	1.65*	1.71	1.55*
White	1.90	1.77**	1.93	1.83**	1.81	1.68*
Overall	1.87	1.74**	1.91	1.80**	1.80	1.67*

\*significant at .05 level

\*\*significant at .01 level

Despite beginning with the most internal control orientation, the college-bound groups showed substantial change. School appears to be good for this group. Those who are academically successful enough to be going to college begin with an enhanced sense of control over conditions in their lives. Staying in school to graduation also results in gains for each racial group, but the stay-ins lag far behind the college-bound. Using the amount of change toward external control as a standard, this data does not support the argument that dropouts would have benefitted by staying in school (except in the case of blacks). The dropouts begin with a significantly different orientation to control, and it may be that school with its present reward structure can not be expected to have much impact on this factor. Dropping out may be good in the sense it gives these youth an opportunity to gain a sense of control through participation in adult activities. Unless one is very good at doing those academic tasks rewarded by schools it is not likely a student will gain a greater sense of internal control. If this is the case, then schools can be seen as reinforcing the existing status of its students rather than helping those most in need of an increased sense of control over one's plans, decisions and circumstances.

#### CONCLUSION:

In most respects our findings from the HS&B data parallel or at least do not contradict the findings of previous studies. For example,

Table 7

Sample Means for Locus of Control by Group and Race  
(higher numerical values indicate greater sense of internal control)

	Dropouts		Non-college Bound		College-Bound	
	1980	1982	1980	1982	1980	1982
Hispanics	2.48	2.66**	2.60	2.66	2.72	2.92**
Blacks	2.59	2.59	2.55	2.74**	2.88	2.98**
Whites	2.65	2.82**	2.79	2.87**	3.03	3.12**
Overall	2.61	2.76**	2.74	2.83**	2.99	3.10**

\*significant at .05 level

\*\*significant at .01 level

SES was found to be an important predictor of dropout by Combs and Cooley, Bachman, Rumberger and Peng. School ability and performance persist as important predictors of student status. Like Bachman who found "in-school delinquency" as a strong predictor of dropping out, we found several more specific variables indicating conflict between students and the institution to be more important predictors. Our analysis of the HS&B data depart from earlier findings, however, in that SES and school performance are reduced in relative importance while the variable of "Expected School Attainment" along with the conflict variables are more powerful.

Furthermore, our analysis sees student and school interacting to produce dropouts. Unlike many researchers, we see the school as having an opportunity for initiative and responsibility to respond constructively to those students whose continued education is at risk. In contrast, Bachman concludes that "dropping out is a symptom which signifies a mis-match between certain individuals and the typical high school environment..." The mis-match exists because of limited academic ability, school failure and delinquent behavior. These problems are not likely to be resolved by staying in school longer, according to Bachman. Furthermore, Bachman concludes that the campaign against dropping out seems questionable because research on the longitudinal effects of dropping out indicate "that some young men can manage reasonably well on the basis of ten or eleven years of education. Perhaps others would do so if they were not branded as 'dropouts'" (p. 181-182).



We believe this conclusion is irresponsible because it suggests that schools need not attempt to provide effective education for all students. It argues, instead, for legitimizing a "push-out" strategy by schools for those who are least able to benefit from a traditional academic curriculum. This position tends to absolve the school of responsibility for the least advantaged in our society. It suggests that public education is for some youth but not all.

While most of the literature on dropouts is directed only at the deficiencies found in the marginal student, we see those same characteristics as a reflection on the institution also. More precisely, we consider the possibility that certain student characteristics in combination with certain school conditions are responsible for students' decisions to leave school early. We do not want to minimize the fact that students differ markedly on a range of personal and social characteristics; how could it be otherwise? However, schools are obliged to accept these differences as facts of life and respond in a constructive manner to these differences. We believe this stance along with our findings provide grounds for recommending general policy and practice reforms that would make school more responsive not only to those who drop out, but also to a large body of students who now stay in school reluctantly.

Our reform recommendations stem from several specific findings. Three of these findings are the perceived lack of teacher interest in students, the perception that the discipline system is ineffective and unfair, and the presence of wide-spread truancy among some students. These findings form a pattern that we believe cannot be easily dismissed

because they reflect a fundamental problem with the perceived legitimacy of the institution. We see these findings as the tip of the iceberg that indicates certain institutional problems go much deeper than dropouts. The findings have implications for the degree of engagement by even those who stay to graduation.

In addition to revealing problems in the area of discipline, there is also the more general finding regarding expected school attainment for a large number of youth. Some may dismiss this finding as the product of unrealistic expectations by naive students, and there may be an element of truth in this view. On the other hand, it also suggests that schools in performing their sorting function for society may be unnecessarily harsh and discouraging to many adolescents. The sorting and selecting function does not require schools to be negative and alienating. Moreover, after the selection of those who will go to prestigious colleges is completed, there is a range of possibilities for additional education to which many youth could aspire. Selecting the college-bound elite is only one of the tasks schools should be engaged in, and the remaining body of students should receive the kind of attention that will allow them to pursue all the schooling they can profitably use.

Three general reforms of policy and practice are necessary if schools are to respond to these problems and perform the social mandate with which they are entrusted. These three reforms include: (1) an enhanced sense of professional accountability among educators toward all students; (2) a renewed effort to establish legitimate authority within the institution; (3) a redefinition of school work for students and teachers that will

allow a greater number of students to achieve success, satisfaction and continue with additional schooling.

The enhanced sense of professional accountability speaks to the problem of providing for equity in public schooling. Of course, equity does not mean that all students will receive the same curriculum or achieve at the same level, but it does imply that all youth must be given an opportunity to receive some reasonably attractive benefits of a publicly financed school system. Educators must be responsible for those students who are not ideal academic performers as well as for those who are talented. There is evidence now that many students do not believe teachers are very interested in them. To the extent those who come from disadvantaged backgrounds perceive a less than fair commitment by the institution to educate them, their school effort is not likely to be sincere. Professional accountability to those who are least advantaged is the only responsible stance educators can take. The profession must work to establish a variety of mechanisms to insure that such students receive all the personal and social benefits possible. Professional accountability must begin with a general belief on the part of educators that such a commitment is important and a social responsibility. In addition, specific institutional mechanisms must be developed to define this accountability and make it a matter of both policy and practice.

One implication of our study is that schools are in serious trouble with respect to the maintenance of authority when many students are skeptical of the discipline system. One can view the problem of legitimate authority as an extension of accountability. It may be

that the impersonal bureaucratic structure of large high schools has created a sense of alienation among students who feel that the adults do not care for them and that they are likely to be treated in an unfair or arbitrary manner. The comprehensive high school of today may create adult to student relationships that result in skepticism and cynicism for both parties. More personal and authentic relationships are probably necessary to reestablish widespread belief in the legitimacy of the institution.

Some reforms in the discipline system are necessary if schools are to avoid creating a sizeable group of deviants who can see no alternative to resisting the school's authority if they are to retain their own dignity. At minimum schools must find ways of preventing the widespread truancy that has become a norm in many schools. The very students most at risk must not be allowed to undermine their own chances of success through either misguided permissivism or outright neglect on the part of educators. If the marginal academic student is to benefit from the formal schooling, her or she must be in class. Part of the route to professional accountability is through the establishment of legitimate authority in the educational process <sup>for</sup> those who are to benefit from educators' efforts. Based on case studies of effective alternative programs for marginal students, the evidence indicates that such students respond positively to an environment that combines a caring relationship and personalized teaching with a high degree of program structure characterized by clear, demanding but attainable expectations (Wehlage, 1983a).

Finally, a redefinition of school work is needed to be responsible to the broad range of youth the school is mandated to serve. A central problem with schools today is that success is narrowly defined and restricted to a few at the top of their class ranking who are destined for college. Such a restricted notion of competence and success for youth is indefensible in terms of both the individuals involved and society as a whole. While proficiency in traditional academic subjects is important and serves to stimulate some youth, there are many more who should be encouraged to develop proficiency in other domains. Unfortunately, vocational education, the most obvious alternative, is currently in a dismal state in many schools. Moreover where there are strong vocational programs, they often exclude those students most in need of an alternative that provides success and positive roles.

Schools do have available to them a variety of exemplars using non-traditional conceptions of curriculum and learning. Some of these have been dramatically successful with a range of students. One specific example is the "Foxfire" magazine published by high school students. In addition, we have examples of schools focused on the performing arts, health care and medicine, and human services. There are excellent programs that have youth developing and managing small businesses. There are also exemplary vocational programs that have youth involved in the building trades or other skilled fields where the curriculum is based on an "experiential" conception of learning. Such diverse opportunities for success and development can change the view that many youth now have that "school is not for me."

Those who are pessimistic about the willingness and/or ability of schools to respond constructively to the marginal student with both a more caring relationship and a more stimulating curriculum may want to argue that this is an opportunity to try some form of voucher to generate new conceptions of schooling (Wehlage, 1983b). A voucher plan need not supplant existing public schools. Instead it could be used as a supplemental strategy to create opportunities for students to have planned educational experiences in community-based programs. Some of these could be explicitly vocational while others could provide direct exploration in the arts, sciences, medicine, the law as well as performance of public services. The use of the voucher idea may be necessary to attenuate the nearly monopolistic control schools now have over the education of youth.

## References

- Bachman, J.G., Green, S. and Wirtanen, I.D. Dropping Out - Problem or Symptom? Youth in Transition Series, Volume 3. Institute for Social Research, Ann Arbor, Michigan, 1971.
- Camp, C. School Dropouts. California Legislature: Assembly Office of Research, Sacramento, California, May, 1980.
- Combs, J. and Cooley, W. "Dropouts: In High School and After High School." AERJ 5(3) (1968): 343-363.
- Ford Foundation Letter 15(3) (1984): 1.
- Peng, S. High School Dropouts: Descriptive Information from High School and Beyond. National Center for Education Statistics, Washington, D.C., 1983.
- Rumberger, R. "Dropping Out of High School: The Influences of Race, Sex, and Family Background." AERJ 20(2) (1983): 199-220.
- Wehlage, G. Effective Programs for the Marginal High School Student. Phi Delta Kappa, Bloomington, Indiana. 1983.
- Wehlage, G. "The Marginal High School Student: Difining the Problem and Searching for Policy." Children and Youth Services Review (5) (1983). 321-342.